

1 **WHAT IS CLAIMED IS:**

2 1. An ultrasonic sensor assembly for a vehicle reversing radar

3 comprising:

4 an ultrasonic sensor (10) with two electric wires (12);

5 a sleeve (20) made of rubber material, the sleeve having a chamber (22)

6 receiving the sensor (10), and a cone-shaped opening (24) with a center defined

7 at a front end of the chamber (22); and

8 a guide wave cone (30) provided at the center of the cone-shaped

9 opening (24) and abutting the sensor (10).

10 2. The ultrasonic sensor assembly as claimed in claim 1, wherein the

11 sleeve (20) further has a barrier (240) formed at a lower side of the opening (24).

12 3. The ultrasonic sensor assembly as claimed in claim 1, wherein the

13 guide wave cone (30) is installed on a U-like bracket (32) integrated in the sleeve

14 (20).

15 4. The ultrasonic sensor assembly as claimed in claim 3 further

16 comprising a heating wire (34) extending through and out from two free ends of

17 the U-like bracket (32).

18 5. The ultrasonic sensor assembly as claimed in claim 1 further

19 comprising a housing (40) with a passage (42) for receiving the sleeve (20) and

20 sensor (10), and a back cover (44) provided at a rear side of the housing (40).

21 6. The ultrasonic sensor assembly as claimed in claim 5, wherein the

22 sleeve (20) has a flange (26) formed at a rear side and abutting a shoulder (420)

23 formed in the passage (42).

24 7. The ultrasonic sensor assembly as claimed in claim 5 further

- 1 comprising a cushion (50) provided between the back cover (44) and the sleeve
- 2 (20).